

LAPITA ORIGINS, DISTRIBUTION, CONTEMPORARIES AND SUCCESSORS REVISITED

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In 1984 I published a paper in *Journal of Pacific History* called "Lapita origins, distribution, contemporaries and successors" (see also Spriggs 1985). It was written on the eve of the ANU Lapita Homeland Project (Allen 1984) and was an attempt to set out what I thought were important strands of evidence in relation to Lapita archaeology which needed further examination.

Since that paper was written the Lapita Homeland Project and its many successor projects have taken place (Allen and Gosden 1991, Allen and White 1989, papers in the Special Section of *Antiquity*, September 1989). There has been a major reworking of Oceanic Austronesian linguistics by Ross (1988, 1989) and a rapidly growing number of genetic studies of relevant Pacific and Southeast Asian populations, recently summarized by Hill and Serjeantson (1989). In revisiting the 1984 "position paper" in the light of this new evidence I wish to deal mainly with Lapita origins, on which my views have changed most, and so will deal briefly with the other issues first.

CONTEMPORARIES AND SUCCESSORS

In 1984 the most controversial parts of my paper were the sections on contemporaries of and successors to Lapita. My sternest published critic was Green (1985). I had suggested that there was basic continuity between Lapita and later cultures in Island Melanesia¹, as there was in Polynesia. This was argued on the basis of a statistically indefensible, but no less true for that, Table showing continuity in artifact forms such as various shell adze and ornament forms, fishhooks and stone adzes, and a consideration of what I called transitional sites. These were understood as sites with a basic continuity in ceramics but without classic Lapita dentate stamping. This had dropped out to be replaced by decorative techniques such as incision and *appliqué* which were present but rare in Lapita assemblages and which became the primary types of pottery decoration in later styles.

Tied in with this was a discussion concerning certain assemblages usually suggested as contemporary with but distinct from Lapita - the Podtanean or Paddle-Imprinted in New Caledonia, Mangaasi in Vanuatu, the Aceramic of Poha Cave on Guadalcanal in the

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Solomons, etc. I argued that these were either facies of Lapita culture or themselves "successors" in the sense of dropping out early from the Lapita network but deriving from it - this last possibility being my suggestion in relation to Mangaasi.

Subsequent research results have not led me to change my mind on these questions, except in relation to the Guadalcanal case which is discussed below. A major piece of supporting evidence has been Galipaud's (1990) demonstration in New Caledonia that in terms of fabric the Paddle Impressed or Podtanean style, with dates contemporary with Lapita there, is identical to Lapita. These two styles of pottery would appear to have been made by the same people. Galipaud sees the Paddle-Imprinted pottery as the domestic ware of Lapita in New Caledonia and notes that concentrations of one or the other occur generally in adjacent sites which may in fact be different parts of single site complexes. Early Plainware assemblages which occur near classic Lapita sites, and are contemporary with them, such as the Növlaö rockshelter on Santa Cruz in the Southeast Solomons (McCoy and Cleghorn 1988), may also be explained in similar fashion. The detailed pottery sequences now starting to appear from the Bismarck Archipelago sites show that as dentate stamping declines, other more "Mangaasi-like" decorative styles come into prominence. Incision, *appliqué* and fingernail impression became common while variety in vessel shape decreases over time (see papers in Allen and Gosden 1991).

Roger Green appears to have moved much closer to my 1984 position on these issues than he was in his 1985 comment on my paper (see, for instance, Green in press). He has recently gone so far as to publish that the infamous New Caledonian tumuli were giant megapode mounds rather than being contemporary or slightly earlier cultural manifestations there (Green 1988), prompting Golson to mount a new expedition to re-examine them in mid-1990.

Pre-Lapita occupation had not been established south of the Bismarck Archipelago in 1984, but excavations on Nissan (a raised Pleistocene atoll between New Ireland and Buka at the northern end of the Solomons) by the author in 1985 established human occupation within sight of the main Solomons by the mid-Holocene (Spriggs 1991). Later research by Wickler on Buka established occupation by 28,000 BP in the northern Solomons (Wickler and Spriggs 1988). PhD research by David Roe of the ANU has now established pre-Lapita occupation for Guadalcanal (Roe in preparation). I had previously explained away the aceramic nature of the Poha Cave assemblage there as a special use component of Lapita, this cave containing important petroglyphs and perhaps not typical of contemporary sites. Further research on the island by Roe has failed to find any assemblages of Lapita age with pottery and so Guadalcanal does indeed appear to represent a contemporary but non-Lapita culture in Island Melanesia beyond the Bismarcks.

My comments on lack of contemporary cultures in Island Melanesia should be limited therefore to Remote Oceania south of the main Solomons chain where Lapita occupation on present evidence does appear to represent initial settlement - Santa Cruz, Vanuatu, New Caledonia and Fiji (Spriggs in press)².

LAPITA DISTRIBUTION

My 1984 suggestion on distribution was that the apparent concentration of Lapita sites on small offshore islands was an artifact of sampling to do with post-depositional landscape change obscuring sites on larger islands, rather than a true representation of where Lapita sites were generally located.

I now feel that this view overstates the case. While there may well be occasions where Lapita sites on larger, high islands are deeply buried by alluvium, this does not alter the fact that both in Near and Remote Oceania Lapita sites are a coastal phenomenon. In addition, the new evidence from Mussau (Kirch 1988), the Arawe Islands (Gosden 1990), New Britain (Specht in Gosden *et al.* 1989), Nissan (Spriggs 1991) and Buka (Wickler 1990) demonstrates that an important component of Lapita settlement pattern was habitation on stilt houses over the reefs adjacent to larger islands in preference to dry land occupation. Such a pattern might be interpreted as having a defensive function, or as a response to the high incidence of malaria in the immediate coastal areas of the larger islands.

An interesting pattern of rockshelter use in the Bismarcks and Solomons should be noted here. On Manus, New Ireland and Buka, caves and shelters which were occupied during the early-mid Holocene generally go out of use prior to the Lapita period and are only re-occupied post-Lapita. Part of the inland or large island invisibility of Lapita is therefore to do with a pre-Lapita shift in settlement use. In most cases the sites on the larger islands which provide our primary evidence for pre-Lapita occupation show no evidence of use at the relevant time, for reasons unknown. The inland evidence then, apart from on Guadalcanal, remains equivocal.

LAPITA ORIGINS

Two models were examined in 1984: the orthodox scenario of Southeast Asian settlers shooting through to Polynesia like the proverbial Bondi Tram, and the model derived from Jean Kennedy, Jim Allen and others of a local Bismarcks origin for Lapita while admitting of some input from the west in the form of language and pottery manufacture, though not perhaps the Lapita decoration system itself. At the time I allowed a long period of 1000 years or so for Lapita to "coalesce" in the Bismarcks before spreading out as Classic Lapita to conquer the Pacific. I also took a swipe at the physical anthropologists who generally thought it impossible to derive Polynesians from any populations in Melanesia by founder effect or adaptation, suggesting that archaeology and linguistics contradicted this view.

The mass of new evidence from the Bismarcks has now brought me somewhat closer to the orthodox scenario. Lapita appears suddenly in the Bismarcks, at about 3800-3600 cal. BP. Although I reject Kirch and Hunt's (1988a, 1988b) view of an archaeologically instantaneous spread as far as Tonga and Samoa, the pause in the Bismarcks is only on the order of 600 to 400 years until about 3200 cal. BP (Spriggs 1990b). Colonization as far as Samoa is then complete by about 3000 cal. BP. This rapid expansion should be compared with that of generically similar neolithic assemblages in

Island Southeast Asia which spread from Taiwan to Timor between 5000 and 4000 BP (Spriggs 1989).

Not present in Island Melanesia before Lapita were the three Oceanic domesticates - the pig, dog and chicken - and the commensal Polynesian rat, pottery, some of the more complex shell ornament types and fully ground stone axes. The status of various food plants (i.e. whether indigenous or introduced) is unclear at this stage, as is whether the pre-existing populations of the Bismarcks and Solomons had agriculture as their economic base. No Manus obsidian is found outside of Manus pre-Lapita, in contrast to the widespread movement of New Britain obsidian. Near the Talasea obsidian sources on New Britain there is a distinctive pre-Lapita obsidian stemmed tool technology which does not carry on into Lapita-period sites (Torrence, Specht and Fullagar 1990). No one has yet, bar Dyen and Terrell, seriously suggested that the Austronesian languages of the area are not of Southeast Asian derivation.

As more work is conducted in the Bismarcks and Solomons, however, we are chipping away at the edges of the uniqueness of Lapita material culture. Some of the marine shell component of this, previously considered unique to Lapita, has now been found in pre-Lapita contexts:

1. *Tridacna* shell adzes were in use on Manus on evidence from the Pamwak site 7000 and possibly up to 10,000 years ago³.
2. *Trochus* shell armbands are now known from pre-Lapita contexts on Guadalcanal (David Roe, personal communication).
3. Shell beads occur in early contexts on Guadalcanal (David Roe, personal communication) and from Matenbek on New Ireland (Jim Allen, personal communication).
4. Simple *Trochus* fishhooks are suspected as being pre-Lapita on evidence from the Pamwak site dating to somewhere between 8000 and 5500 cal. BP. No *Trochus* shell was recovered from the midden at Pamwak except as a small quantity of cut shell resembling the fishhook blanks common in Kirch's Mussau Lapita sites⁴.

We await with interest Gosden's detailed analysis and hopefully further excavation at the Lolmo Cave site in the Arawe Islands (see Gosden *et al.* 1989:565,568). Interpretation of the site is marred by dating inversions but at present there is at least a strong suggestion that aspects of the Lapita shell technology go back there to 6100 cal. BP. The artifacts in question are simple *Trochus* fishhooks, *Trochus* armband fragments, pierced shell and part of a shell trumpet (Chris Gosden, personal communication).

I had better canvas, before others do, the possibility of my "Lapita without pots" assemblage from Nissan (the Halika phase - see Gosden *et al.* 1989:568-9,574,581; Spriggs 1991) being in fact non- or pre-Lapita. The assemblage consists of *Tridacna* shell adzes, a simple *Trochus* fishhook, pearlshell knives, a range of plant materials and scanty remains

of pig bone. I remain unconvinced of this, however, as the site is contemporary with, not earlier than, the earliest Bismarcks Lapita assemblages. The range of plant remains, the presence of pig and the pearlshell knives are as yet unparalleled in pre-Lapita assemblages.

Despite some cross-over of artifact types from pre-Lapita to Lapita assemblages, or at least a partially shared artifact inventory, I do think that new colonists into the area, initially at least largely endogamous prior to further movement to the east into Polynesia, are the critical factor in the development of Lapita culture (Spriggs 1990c). There was local input, however, as I and others argued in 1984. In the end it was the incoming population which was genetically absorbed by populations we know to have been in Near Oceania long before. While modern populations in Island Melanesia can be seen to derive their cultures from a transformation of Lapita roots, we must not neglect that they also share an inheritance from the pre-Lapita inhabitants of the region. Less than I thought in 1984, but still significant.

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NOTES

1 I use Island Melanesia in a restricted sense to include the Bismarck Archipelago, the Solomons, Vanuatu, New Caledonia and Fiji. The main island of New Guinea has so far yielded sherds of only a single Lapita vessel, in my judgement of late style (Spriggs 1990a), and so is on present evidence "missing" a period critical for the later prehistory of the aforementioned archipelagoes.

2 While pre-Lapita occupation of Santa Cruz, Vanuatu and New Caledonia is not out of the question (for Fiji it appears most unlikely), three main lines of evidence are against it. First, the biogeographic impoverishment in the flora and fauna of at least Vanuatu and Santa Cruz as compared to the main Solomons (commented on originally by Pawley and Green 1975). Secondly, there is evidence for the extinction of the majority of the New Caledonian avifauna during Lapita occupation after its presence is attested in non-human deposits dating to around 3500 uncal. BP (Balouet and Olson 1989). Evidence from elsewhere in Remote Oceania suggests that such extinctions tend to occur within the first thousand years or so of human occupation of an island (Steadman 1989). Thirdly, a pollen core from Aneityum in Southern Vanuatu shows no evidence for human impact by burning until 3000 cal. BP (contemporary with the earliest Lapita sites in the region) when a massive phase of forest clearance begins (Hope and Spriggs 1982).

3 This evidence comes from recent fieldwork at the Pamwak site on Manus conducted by Wal Ambrose, Clayton Fredericksen and the author in 1990. I am indebted to my co-workers for permission to cite this evidence prior to its detailed publication.

4 The author was able to examine Kirch's material at the University of California, Berkeley. Subsequently at the IPPA Congress Kirch supported the interpretation of the Pamwak *Trochus* material as fishhook blanks.

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